

REMARKS

The rejections to Claims 1-11 as being anticipated by DE '169 under 35 USC §102(e) and of Claims 1-11 as being contemplated over The Encyclopedia of Materials Science and Engineering under 35 USC §103(a) is traversed. Reconsideration of each of these rejections is respectfully requested.

The Office Action points generally to Figure 5 of the DE '169 document, which is assigned to Hitachi, Ltd., the assignee of the present application, and corresponds to U.S. Patent No. 6,543,424 B1, but the Examiner does not apply the techniques of that document to the claimed elements. That document cannot be so applied because it relates to improvement of wear resistance with a decrease in hardness by using an intermetallic compound, specifically TiN or CrN at the outermost surface layer, whereas the present invention uses carbon film on the outmost surface layer to increase wear resistance with a low friction coefficient. (The claims have been amended to use consistent terminology "carbon film" as used in original Claims 7, 8 and 9).

The Encyclopedia document is even further removed inasmuch as it is merely cited for the general proposition that the nitriding process was known for improving wear resistance. That is, this document relates only to a nitriding layer. It says nothing about the outer carbon film layer or the construction of a fuel pump slipper on which an oxide layer is formed on the surface of the slipper. The general observation that fuel pumps are well known and the conclusion, unsupported by record evidence, that it would have been obvious to harden the

sliding and rotating surfaces in the claimed manner is legally insufficient to establish a prima facie case of obviousness. The Patent and Trademark Office is requested, if further prosecution is deemed necessary, to point out where each claim element is found on the document(s).


Otherwise, early and favorable action is earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #05620750923).

Respectfully submitted,

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